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10/086,782	02/28/2002	Carol L. Colrain	50277-1957	8991

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HICKMAN PALERMO TRUONG & BECKER/ORACLE  
2055 GATEWAY PLACE  
SUITE 550  
SAN JOSE, CA 95110-1089

EXAMINER

LE, DEBBIE M

ART UNIT	PAPER NUMBER
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2168

MAIL DATE	DELIVERY MODE
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09/05/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/086,782

Applicant(s)

COLRAIN ET AL.

Examiner

DEBBIE M. LE

Art Unit

2168

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 June 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 45-60 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 45-60 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/086,782	COLRAIN ET AL.	
	Examiner	Art Unit	
	DEBBIE M. LE	2168	

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**Attachment(s)**

- |                                                                                      |                                                                   |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____                                                          | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

***Response to Amendment***

The applicant's arguments filed on June 12, 2007. Claims 45-60 are pending.

The rejection under 35 U.S.C. 101 is removed.

The rejection to 112 second paragraph is removed.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 45-60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wolff (US Patent 6,185,601 B1) in view of Khalil et al (US Patent 6,430,698 B1).

As per claim 45, Wolff discloses a machine-implemented method, comprising the steps of:

requests to a service provided by a first node within a cluster, wherein said first node is configured to provide said service to requests (Fig. 1a, #104a-106a0, col. 2, lines 64-65, as sending an I/O request to a first server node for at least one resource among the plurality of server nodes);

in response to said first node becoming unavailable (col. 2, line 66, as determining an I/O failure of the first server node), automatically configuring a second node of the cluster to respond to requests (col. 2-3, lines 67-2, as redirecting request from the at least one resource to another server node among the plurality of server nodes, in response to the determining act);

Wolff teaches after said first node becomes unavailable, an alternate node is re-mapping in response to an overload or failure condition of the first node (col. 5, lines 39-48).

Wolff does not explicitly teach a service requestor using an Internet Protocol (IP) address to address requests, the service requestor using said IP address to send address a message to said cluster related to said service; and in response to said message, said second node of the cluster sending a response that indicates an error condition. Khalil discloses a service requestor using an Internet Protocol (IP) address to address requests (col. 6, lines 63-67, col. 8, lines 18-19, as virtual distributed home agent protocol (hereafter "VDHAP") identifies the home agent IP address for the home

agent 16), and the service requestor using said IP address to send address a message to said cluster related to said service (Fig. 10, col. 8, lines 2-16, as VDHAP sends heartbeat message to other home agent 16 in the same home link, wherein the message contains source address and destination address information); and in response to said message, said second node of the cluster sending a response that indicates an error condition (col. 8, lines 66-67, col. 9, lines 1-14, as recovery information ack message is send by a failure recover agent in response to a recovery information request message). Thus, it would have been obvious to one of ordinary skill on the art at the time invention was made to combine the teachings of the cited references to combine the teachings of the cited references to implement the step of using IP address to address request to a service provider and using IP address to address message and sending a response message indicate an error condition as disclosed by Khalil because it would enable Wolff's system to manage and provide efficient communication and utilization of resources between devices and other system, such as when a mobile computer system or device has moved from location to another location (Khalil, col. 1, lines 13-17), and/or provide backup and recovery home agent services to mobile node(s) in the event that a failure or error has occurred at a home agent (Khalil, col. 8, lines 51-55).

As per claim 46, Khalil teaches upon receiving said response, the service requestor identifying a second IP address to access said service; and the service requestor using said second IP address to send address a second message to said cluster related to said service (col. 9, lines 8-15).

As per claim 47, Wolff teaches storing, at the first node, information identifying one or more nodes of the cluster as being standby nodes, wherein each of the one or more standby nodes may be instructed to provide the service if the first node becomes unavailable (Fig. 5a-5b, col. 19, lines 45-67, col. 20, lines 1-35).

As per claim 48, Wolff teaches in response to said first node becoming unavailable, determining if said first node is configured to allow the service to be provided by another node of the cluster (col. 15, lines 19-22).

As per claim 49, Wolff teaches in response to determining said first node is configured to allow the service to be provided by another node of the cluster, determining a standby node of the cluster to perform the service; and instructing the standby node to perform the service (col. 10, lines 7-36).

As per claim 50, Wolff teaches in response to said first node becoming unavailable, instructing a standby node of the cluster to perform the service; determining if the plurality of services provided by the standby node may be provided by another node of the cluster; and if the plurality of services provided by the standby node may not be provided by another node of the cluster, configuring the standby node to disallow the plurality of services to be provided by another node of the cluster (col. 20, lines 65-67, col. 21, lines 1-22).

As per claim 51, Wolff teaches in response to configuring the standby node to disallow the plurality of services to be provided by another node of the cluster, issuing an alert to a user (col. 11, lines 38-40, col. 12, lines 26-31).

As per claim 52, Wolff further teaches wherein said first node comprises

a monitor process, and wherein said monitor process is configured to detect if said first node becoming unavailable (col. 5, lines 39-48).

Claim 53 has similar limitations as recited in claim 35, therefore, it is rejected under the same rationale.

Claims 54-60 recites similar limitation as claim 46-52, therefore, they are rejected by the same subject matter.

### ***Response to Arguments***

Applicant's arguments filed June 12, 2007 have been fully considered but they are not persuasive. Details are stated below.

Applicant argues that Wolff fails to teach "in response to said first node becoming unavailable, automatically configuring a second node of the cluster to response to requests" because Wolff does not teach a second node is configured, instead, Wolff teaches requests are redirected from one client to another server node (applicant's remark page 12, item 1).

In response, it is noted that Wolff teaches in a cluster system, there are a plurality of nodes which are eligible for performing the administrative server functions for a specific volume...in order for the node/server to be a candidate for performing the administrative server functions, it must have...or the field "can group migrate" must be set to Boolean True. That is each volume record in the resource database indicates if the group with which the volume is associated can migrate, i.e., be administratively



handle by another node, the Boolean True is indicated (col. 20 through 21, lines 65-25). Thus, when the node/server is set to Boolean True, it is automatically configured to be a standby node/server which is eligible for performing the administrative if the current administrative node becoming unavailable.

Secondary, the combination of the cited references fails to teach or suggest meaningful portion of the subject matter recited in the independent claim 45 that “a second node of a cluster is configured to respond to requests that are **addressed to said IP address**”, because the examiner has pointed how each individual fragment correspond to a similar fragment in one of the two references (applicant's remark page 15).

With respect to claim 45, the examiner respectfully submits that the examiner evaluates the meaning of the claimed elements as a whole without “evaluating the dissected elements in isolation”. Because Wolff teaches “packet-switching” (col. 57, line 61), but Wolff does not explicitly teach that “using an Internet Protocol (IP) address to address requests”. Even though the “packet-switching” has been defined by the Wikipedia such as “Packet switching can be categorized into datagram networks...Examples of the first category are Ethernet and IP networks.” Because the examiner has been so carefully examined the claimed elements as a whole, therefore, examiner has relied on Khalil to support the element “IP address”. Accordingly, the subject matter to be patented as a whole is disclosed or taught by the prior art of record.

Third, Applicant argues that Khalil fails to teach “the service requestor using said IP address to address a message to said cluster related to said service” because Khalil there is no service being requested nor service requestor is disclosed by Khalil.

As discussed in the preceding paragraph, the examiner has relied on Khalil for teachings of the missing elements “using an Internet Protocol (IP) address to address requests, a message”, but Wolff has been relied upon for the teachings of a “service being requested” or a “service requestor”.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DEBBIE M. LE whose telephone number is (571) 272-4111. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tim Vo can be reached on (571) 272-3642. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



DEBBIE LE  
PRIMARY EXAMINER

8/31/07